combination of price and functionality -- is promoted at each level. At the basic package level, the allotted credit would be as close as possible to a competitive price. Given the nascency of competition in many areas, either a calculated bid-ceiling or a "cost plus" approach with some reasonable return for the service provider should be used to approximate a competitive price. For purposes of determining the impact on the USF, this price would include monthly rates for connectivity and Internet access, plus amortized installation costs, as inputs into the fund. The basic package (portable) credit would -- for purposes of this initial E-rate plan -- not exceed the amount based on the appropriate regional or state-specific benchmark. In addition, if a competing provider can offer a lower cost or better value basic package, then they will likely win the bid.

For the package of special and advanced services, the bids, constrained by a "best value" ceiling, would serve to substantially reduce the price a school or library would pay but would not generally be reimbursed from the USF; the fund would be tapped only for high-cost and low-income areas. Purchases for those institutions from the special and advanced service basket in each case would reflect deep discounts applied to the winning competitive value-bid. (Rural locales comprise a disproportionately large percentage of high-cost areas, as illustrated in the Attachment). The amount of the discounts for high-cost and low-income areas would be covered by the USF.

The overall size of the fund will be a function of several factors at any given point in time. These include: number and size of schools and libraries; their associated requirements for basic connectivity (e.g., transmission speed adequate to serve the number of users and the one internal connection and Internet access), or advanced connectivity; the value of the basic package (portable) credit; and, the particular deep-discount methodology used for low-income or high-cost institutions and the best-value bid from which these discounts would be calculated.

The ceiling for the bidding process would also affect the size of the fund. For the basic package, if there are no bids, the ceiling would be calculated on the basis of the best available commercial rate in a similarly situated area or on a cost-plus basis. For low-income or high-cost schools or libraries, the deep-discount percentage(s) would be applied with respect to special and advanced services to an already discounted price based on the best available commercial rate or an appropriate costing methodology.

D. A Properly-Crafted Procurement Plan Would Promote NII Access on a Sustained Basis for Schools and Libraries

Establishing an appropriate set of incentives and safeguards for matching purchasing decision with technology plans will foster an integrated approach for schools and libraries to participate in the Information Age. Schools and libraries still

have adequate incentives to obtain only the bandwidth they need in their basic package. First, the new Act requires a bona fide request for preferential treatment from telecommunications providers. This could take the form of self-certification as part of a request for proposal (RFP). Forty-five states currently have technology plans, and these would help ensure that the purchased services are part of sustainable educational goals. Administrative districts would also oversee budget-related actions by individual schools or libraries. Moreover, equipment needed to use higher bandwidth connections is frequently more costly, thus creating an incentive to realistically estimate their requirements.

While connectivity using services up to the 1.5 Mbps data rate will be included in the basic package of services provided at no cost, it is not anticipated that all schools and libraries will choose to employ the full 1.5 Mbps capacity at each site. The costs for the purchase, administration, and maintenance of the equipment necessary to terminate and use the connection service, be it 1.5 Mbps, 128 Kbps, or 56 Kbps, will be born by the schools and libraries. These costs often increase as the bandwidth of the service increases, thus, a school or library with limited resources has no incentive to seek a "free" 1.5 Mbps data rate if, for example, the cost of the accompanying equipment is significantly greater than that required to support the free ISDN service.

The workings of the marketplace, coupled with a variety of public-private partnerships for training, hardware, content, and technical support, will help meet the Administration's goals of connecting all schools and libraries by the year 2000. Contributions -- whether donations of new or surplus systems, free software, NetDay internal connections, volunteer training or technical assistance -- would complement the E-rate. Moreover, market opportunities can be realized by users as well as suppliers; banding together in buying coalitions, schools and libraries can produce even higher volume discounts and scale economies benefiting all concerned. In addition to the importance of contributions and market opportunities, sustainability should be fostered due to the attractiveness of both "total-package" and volume sales for providers as well as the new capabilities afforded students, teachers, librarians, and their patrons through procurement of Information Age capabilities.

E. Integrating Education and Functionalities

In implementing this plan, a pivotal role would be carved out for the education community. Educational objectives and curricula should properly drive the use of bandwidth, transmission speed, and other functionalities. The Administration recommends that the E-rate and USF approach -- in fact, all facets of the new universal service mechanism -- be

revisited by the Joint Board and the FCC every three years or sooner if requested by bona fide petitions. For example, the basic package should be reviewed periodically to determine whether schools and libraries require different elements over time. During these triennial reviews, policymakers should solicit views from all stakeholders in the educational system to ensure a dynamic and self-correcting process.

This proposal supports the long-standing American tradition of providing free education to every American child. Moreover, this proposal does not give schools a free ride. In fact, schools and libraries are investing hundreds of millions of dollars on computers, software, and teacher training. Those investments could be jeopardized if our schools and libraries cannot afford to pay monthly telecommunications access charges. This proposal guarantees universal access to the Internet for every school and library in America.

IV. CONCLUSION

For the foregoing reasons, NTIA, on behalf of the Departments of Commerce, Education, and Agriculture respectfully requests that the Commission adopt the recommendations contained herein.

Respectfully submitted,

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ATTACHMENT

Telecommunications Costs for Schools: Urban / Rural Comparisons*
(In Michigan and Oregon Rural Areas are Paying Substantially More)

	Cedar Springs School District, Michigan (Rural) 2,797 Students	Northview School District, Michigan (Urban) 3,224 Students	Lake County School District, Lakeview, Oregon (Rural) 65 Students	Portland Public School, Oregon (Urban) 53,370 Students
Cost of T-1 line (1.5 mbps), per month	$570	$250	$2,080	$237
Cost of Internet Access, per month	$425 Covers 4 Schools	$425 Covers 7 Schools	$60,000 Per Year for State. State Provides to the School District	$60,000 Per Year for State. State Provides to the School District
Contract terms	ESA Negotiates Contracts With Costs Varying by Regions and Providers.	ESA Negotiates Contracts With Costs Varying by Regions and Providers.	Cooperative	Cooperative

*Based on informal survey and interviews conducted by American Association of School Administrators, August, 1996.
Other organizations involved include: Consortium for School Networking, National Rural Education Association, and the Council of Greater City Schools.